

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014159**Date Inspected:** 13-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** You Qi Guo.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 10

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Minor brackets on Shear plate A24, A26 Stiffener and Lift 3 South tower mounting plate on Skin B, E. The weld designations reviewed are as follows.

ND1-A24A/B-35, 55, 56

ND1-A26A/B-14, 15, 30

CAMPSA-3-14, 15

CAMPSA-3-5, 6

NDT Notification No-005725

BAY 10

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Lift 3 North tower Skin D Elevator Supports.

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The weld designations reviewed are as follows.

Z69-0-C/F-32-1, 2-N

Z69-0-C/F-33-1, 2-N

NDT Notification No-005727

This QA Inspector observed the following work in progress:

BAY 11:

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040690. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as SD1-STSA4-5-123M-1-7B. ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2212-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 040619, 040690. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as SD1-STSA4-5-123M-1-47B, 5A. ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046704. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as WD1-STSA4-5-143M-1-8A, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2212-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 046704. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as WD1-STSA4-5-143M-1-48A, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040611, 040614. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as WD1-STSA4-5-135M-1-6B, 48A. ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040649, 062125, Perform Flux Core Arc Welding (FCAW) on bearing plate. Joint identified as SD1-A23A/B-31, 34. ZPMC QC Identified as Shao Hao Long. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, 053316, Perform Flux Core Arc Welding (FCAW) on bearing plate. Joint identified as WD1-A25B/E-10, 19. ZPMC QC Identified as Shao Hao Long. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-Tc-P4-F.

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This QA Inspector observed ZPMC qualified welding personnel identified as 040725, 049541, Perform Flux Core Arc Welding (FCAW) on bearing plate. Joint identified as ED1-A29A/B-33, 30. ZPMC QC Identified as Shao Hao Long. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-Tc-P4-F.

Ultrasonic Testing:

This QA Inspector observed ZPMC Ultrasonic Testing Inspector, performing UT on Angle connection Plate Item identified as SD1-SA4-56-139M-1,2,3,4-1A/B, WD1-SA4-56-139M-1,2,3,4-1A/B, SD1-SA4-56-119M-1,2,3,4-1A/B, WD1-SA4-56-119M-1,2,3,4-1A/B at location Bay 11. For more information see below attach photo number 1.

BAY 10

FCAW Process: Repair Welding,

This QA Inspector observed ZPMC qualified welding personnel identified as 053116, 053870. Perform Flux Core Arc Welding (FCAW) on 13M External diaphragm connection plate Buttering up to 5~15mm. Item identified as WD1-A2-1, WD1-A2-2. ZPMC QC Identified as Deng Zhi Bing with temporary welding repair report WRR-T-WR3226, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-2G(2F)Repair.

Repair Welding,

This QA Inspector observed ZPMC qualified welding personnel identified as 057244. Perform Flux Core Arc Welding (FCAW) on 13M External diaphragm connection plate Buttering up to 8~20mm. Item identified as A10. ZPMC QC Identified as Deng Zhi Bing with Critical welding repair report CWR-T-CWR620, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-2G(2F)Repair. For more information see below attach photo number 2.

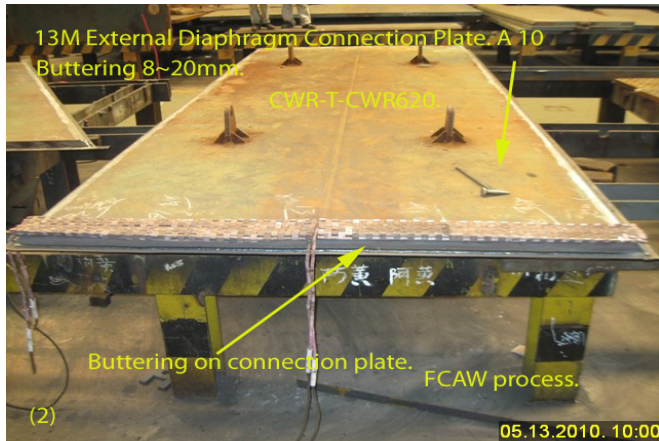
SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 500363, 500373. Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate. Joint identified as SSD1-TL5-1B/F- 35B, 2B, ZPMC QC Identified as Deng Zhi Bing, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-B-U3b.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer